

AUG 29 1989

MATERIAL SAFETY DATA SHEET

N/A
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PREPARATION/REVISION DATE:

February 28, 1989

SECTION I

MANUFACTURER'S NAME: SELECTRONS LTD.		EMERGENCY TELEPHONE: (203) 755-9900
ADDRESS: 137 MATTATUCK HEIGHTS RD., P.O. BOX 115, WATERBURY, CT 06725-0115		
CHEMICAL NAME: Electrolyte Cadmium LHE Solution	COMMON NAME: SPS 5070 Selectron Cadmium LHE Solution	
CHEMICAL FAMILY: Cadmium Salt -- Ethylenediamine	FORMULA: CdO NH (CH) 2 NH 2 2 2	

SECTION II HAZARDOUS INGREDIENTS

CHEMICAL AND COMMON NAME	%	APPLICABLE EXPOSURE LIMITS		
		PEL-WISHA/OSHA	TLV-ACGIH	OTHER
Ethylenediamine CAS #107-15-3 5880-01	<23	25mg/m ³	10ppm ³	
Cadmium Oxide CAS #1306-19-0 1766-01	7.0	as cd metal	.2mg/m as dust	

The Cadmium Salt in this product precedes the hazardous conditions of the Ethylenediamine contact of this material.

CARCINOGENIC INGREDIENTS

CHEMICAL AND COMMON NAME	%	REFERENCE SOURCE		
		NTP	IARC	WISHA/OSHA
Certain Cadmium compounds are suspect carcinogens in animals -- Cadmium Chloride, Oxide, Sulfate and Sulfide.	1626-01	recommended	level	NIOSH# 40ug/m ³

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SECTION III HEALTH HAZARD DATA

ACUTE HEALTH EFFECTS: Inhalation of Cadmium dust can cause irritation of nose and throat. Long exposure over several hours can cause chest pains, sweating, chills and weaknesses. Death can occur. Ingestion may cause nausea, vomiting, diarrhea and abdominal cramps.

CHRONIC HEALTH EFFECTS: Continuous heavy exposure to fumes can cause loss of smell, ulceration of nose, shortness of breath, kidney damage and mild anemia.

ROUTES OF ENTRY: Inhalation and ingestion; skin absorption; oral.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Prolonged exposure has also been reported to cause an increase of cancer of the prostate in moles.

EMERGENCY AND FIRST AID PROCEDURES:

EYES - Flush with water for 15 minutes. Consult a physician.
SKIN - Wash with cold water. If irritation develops and/or persists, consult a physician.
SWALLOWED - Drink large amounts of water and INDUCE vomiting. Contact a physician immediately.

SECTION IV CHEMICAL DATA

BOILING POINT °F	212 °F	SPECIFIC GRAVITY (H2O=1)	1.256
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (____=1)	N/A
SOLUBILITY (Specify Solvents):	pH		
Complete/water	7.5		

APPEARANCE AND ODOR: Yellow solution -- slight ammoniacal odor

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SECTION V PHYSICAL HAZARD DATA			
FLASH POINT (Method used): N/A		FLAMMABLE LIMITS: N/A	
		Lel	Uel
EXTINGUISHING MEDIA: No restrictions			
SPECIAL FIRE FIGHTING PROCEDURES: N/A			
UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A			
INCOMPATIBILITY (Materials to avoid): Strong mineral acids, oxidizers & chlorinated compounds.			
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen & carbon monoxide may be released in a fire.			
		CONDITIONS TO AVOID: N/A	
HAZARDOUS POLYMERIZATION	MAY OCCUR		
	WILL NOT OCCUR	X	
STABILITY	UNSTABLE		
	STABLE	X	

SECTION VI SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Persons not wearing protective clothing must be restricted from the area. Absorb with an inert material and remove to a disposal area if applicable. Ventilate area well -- remove any ignition source. Cannot be flushed to any sewer or drain.	
WASTE DISPOSAL METHOD: Must be disposed of at a permitted facility in accordance with State and Federal regulations because of the Cadmium present.	

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SECTION VII EXPOSURE CONTROL INFORMATION	
RESPIRATORY PROTECTION (Specify type): Mist respirator should be worn - NIOSH approved.	
VENTILATION	LOCAL EXHAUST: adequate exhaust
	SPECIAL: N/A
	MECHANICAL (General): N/A
	OTHER: N/A
PROTECTIVE GLOVES: Impervious rubber	EYE PROTECTION: Chemical safety goggles and/or face shield.
OTHER PROTECTIVE EQUIPMENT: Any other protective equipment so as not to splash on skin.	
OTHER ENGINEERING CONTROLS: N/A	
WORK PRACTICES: Eating and smoking should not be permitted in areas where ethylenediamine is handled or stored. Proper training should be given to personnel handling this material.	
HYGIENIC PRACTICES: Employees who handle this material should wash their hands and face thoroughly before eating, smoking or using rest room facilities.	

SECTION VIII SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Where there is any possibility of exposure to ethylenediamine, facilities for quick drenching of the body should be provided within the immediate work area for emergency.	
MAINTENANCE PERSONNEL:	N/A
OTHER PRECAUTIONS: If clothing should become splashed or contaminated with this product, it should be drenched with water and not worn again until laundered.	

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